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CMCC

field for 1 field

ENGINEERING SPECIFICATION NO . 293

LOW-PASS FILTER

18 July 1957

1. SCOPE

1.1 This specification describes a low-pass filter assembly.

1.2 This specification prescribes operating characteristics, environmental conditions, mechanical characteristics, and acceptance standards for this filter assembly.

1.3 This specification does not prescribe the circuitry or electrical design of the filter.

2. APPLICABLE DOCUMENTS

2.1 No applicable documents.

3. REQUIREMENTS

3.1 Operating characteristics.

3.1.1 The low-pass filter shall have a nominal cut-off frequency of 0.9 kc.

3.1.2 The attenuation of the filter shall be 4.0 db \pm 2.0 db at 200 cps, 1.0 db or less from 500 cps to 800 cps, 4.5 db \pm 2.0 db at 900 cps, 50 db or more at 1.0 kc and at 1.3 kc, and 40 db or more at 1.3 kc, 1.7 kc, 2.3 kc, and 3.0 kc.

3.1.3 The filter shall be designed to operate from a driving source equivalent to a C823/AIC10 Interphone Control and shall be designed to operate into a minimum load of 600 ohms.

3.1.4 The operating level of the filter shall be 4.0 volts rms

3.2 Environmental Conditions.

3.2.1 Within the temperature range 0°C to 85°C, the filter shall operate within specifications.

3.2.2 At 90 percent relative humidity at all temperatures within the operating range, the filter shall operate within specifications.

3.3 Mechanical Characteristics.

3.3.1 Outside over-all dimensions shall be 4-1/4 inches wide, 2-3/4 inches high, and 6 inches long.

3.3.2 The filter assembly shall be mounted on a base of insulated material 4-1/4 inches by 6 inches. A hole shall be provided in each corner for installing the filter assembly.

3.3.3 A removable dust cover shall be provided. The dimensions of the cover shall be such that the filter assembly with the dust cover installed shall be within the over-all dimensions given in 3.3.1.

3.3.4 All input, output, and common connections shall be provided through a single connector extending 1/2 inch through the largest face of the dust cover.

3.3.5 The installed dust cover shall not be connected electrically to any filter circuit.

3.3.6 The dust cover shall be finished in black wrinkle paint and all terminal identifying marking shall be in white.

3.3.7 Reference symbol numbers in the 1901 to 1999 series shall be used in identifying all parts. Reference symbol numbers shall be stencilled in white adjacent to the assembled position of all parts.

4. QUALITY ASSURANCE.

4.1 All filter assemblies shall be tested for conformity to all electrical specifications.

4.2 All filter assemblies shall be inspected visually for quality of finish and markings.